

## CLAIMS

### **What is claimed is:**

1. A video switch for switching a video output of one of a plurality of computers to a target video destination, the video switch comprising:

a voltage converter having an input and an output, wherein a video select signal is operably connected to the input of the voltage converter; and

a discrete radio frequency switch having a control, a video input and a video output, wherein the video output of one of the plurality of computers is operably connected to the video input of the discrete radio frequency switch, wherein the output of the voltage converter is operably connected to the control of the discrete radio frequency switch.

2. The video switch of claim 1, wherein the voltage converter comprises a resistor divider operably connected to a logic device.

3. The video switch of claim 1, wherein the voltage converter comprises a resistor divider operably connected to a comparator.

4. The video switch of claim 1, wherein the discrete radio frequency switch is a depletion mode MOSFET device.

5. A video switch for switching a video output of one of a plurality of computers to a target video destination, the video switch comprising:

a first logic gate having a video control input, an OSD control input, and a control output, the control output of the first logic gate having a first voltage level;

a resistor divider network operably coupled to the control output of the first logic gate;

a second logic gate operably coupled to the resistor divider network, the second logic gate having a control output, the control output of the second logic gate having a second voltage level;

a discrete radio frequency switch having a control, a video input and a video output, wherein the video output of one of the plurality of computers is operably connected to the video input of the discrete radio frequency switch, wherein the control output of the second logic gate is operably connected to the control of the discrete radio frequency switch.

6. The video switch of claim 1, wherein the video output is operably connected to a peaking video amplifier circuit.

7. A video switch for routing video data from a host computer to a target video destination in a KVM system, the video switch comprising:

a plurality of switch circuits configured into a multiplexed circuit, wherein at least one switch circuit of said plurality of switch circuits comprises a discrete radio frequency switch having a control input and voltage converter operably connected to the control input of the discrete radio frequency switch.

8. The video switch of claim 7, wherein the discrete radio frequency switch is a depletion mode MOSFET device.

9. A video switch for connecting the video signals of one of a plurality of computers to a target monitor, said video switch comprising:

three sets of switch circuits for receiving red, green, blue video signals of said plurality of computers respectively, each set of switch circuits comprising a plurality of discrete radio frequency switches, the number of said plurality of discrete radio frequency switches being no less than the number of said plurality of target monitors; and

a control signal generating circuit having a video selecting signal as an input, and generating a plurality of control signals, the number of said plurality of control signals being no less than the number of said plurality of computers, each of said plurality of control signals coupled to a voltage-level shifting circuit, the output of the voltage-level shifting circuit being used for controlling each corresponding discrete radio frequency switch in said three sets of switch circuits.